



# UNIMAST

CNC Machine for multi-sided machining  
of forklift mast channels



[www.unisign.com](http://www.unisign.com)

 **unisign**  
machine tools



**UNIMAST:** The ideal solution for flexible and efficient machining of forklift mast channels.

# Efficient multi-sided machining in pairs

**The UNIMAST is a state-of-the-art vertical CNC machining center designed specifically for forklift mast channels. This CNC machine seamlessly integrates into your existing production flow and processes mast channels in the exact order required for the processes like welding. The flexible product clamping ensures that no changeover is necessary when switching between profile shapes and dimensions. Profile lengths ranging from 1 to 8 meters can be processed in any combination without interruption.**

The UNIMAST is designed to operate autonomously. Mast channels are fed into an input buffer, and using a barcode and/or connection to a production control system, the machine and processing are automatically configured.

The mast channels pass through the system following the FIFO (First In, First Out) method.



## Key benefits

- **High output:**  
Up to 80.000 pairs per year
- **Seamless integration:**  
Tailored to fit your production flow.
- **Autonomous operation with FIFO system:**  
Efficient processing via automated configuration and orderly flow.
- **Exceptional flexibility:**  
Handles various profiles and switch seamlessly between types.
- **User-friendly:**  
Easy programming and intuitive operation.
- **Enhanced safety:**  
Minimal operator intervention and full shielding from machining processes.



### Maximizing throughput

Our UNIMAST CNC machine processes rolled steel mast channels in pairs, securely clamped in a double NC-controlled indexer, one for the left beam and the other for the right beam. This enables simultaneous machining of both beams in a single operation ensuring efficient material flow and seamless integration into your production line.

### Unmatched flexibility

At Unisign, we understand the complexities of forklift mast manufacturing. The UNIMAST accommodates a wide range of profiles, including H, U, I, and custom shapes, in varying cross-sections and lengths. It processes profiles from 1 to 8 meters long and can rotate them along their longitudinal axis for precise machining on all four sides. Switching between profile types is quick and efficient, enabling you to handle even the most diverse product ranges on a single machine.

### Enhanced safety and operator comfort

The UNIMAST is fully enclosed, allowing for safe operation. All chips are collected within the enclosure and transported out via a chip conveyor.

### Loading and unloading

Mast channels are either placed manually on the loader or automatically retrieved from your warehouse. Scanning the barcode or other product codes matches the appropriate machining program, and the machine automatically configures itself. After machining, the channels are transferred to the exit position, ready for the next operation.



**UNIMAST:** Seamless integration into your existing production flow.

# Technical specifications

## Work area

X-axis	mm	2.200
Y-axis	mm	1.000
Z-axis	mm	600

## Spindle

Drive:	kW, Gearbox-driven	51
Speed: Up to	rpm	6.000
Torque:	Nm	1.000

## Various

Tooling		
Taper size		HSK-A100
Number of pockets		41#
Tool change time		9 sec

## Speed

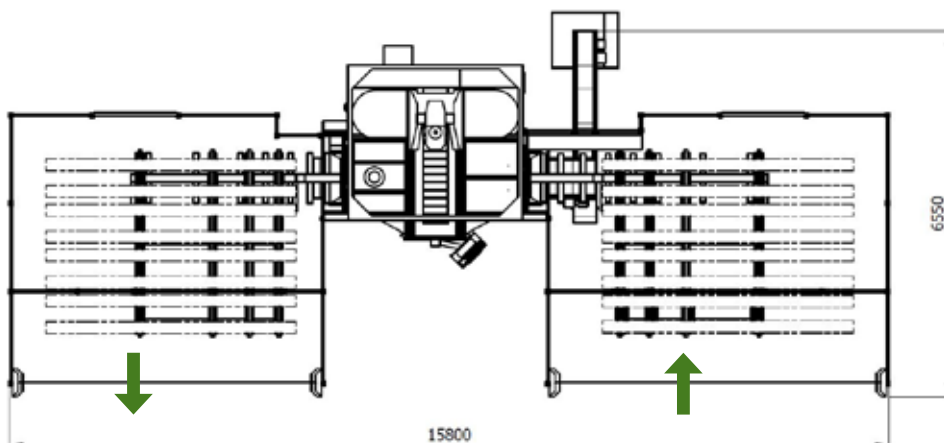
Rapid traverse	mm/min	32.000
Feed rate	mm/min	5-32.000

## Accessories

Minimum quantity lubrication MQL  
 Measuring probe  
 Conveyor system for material flow  
 Siemens



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